Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-536 **Effective Date:** May 1, 2017
Re-evaluation Date: May 2021

Product Name: 29-Gauge SSP Steel Roof Panels Installed Over a Plywood Deck

Manufacturer: Mueller, Inc.
Steel Building Systems and Components
1913 Hutchins Avenue
Ballinger, TX 76821
(800) 527-1087

General Description:
The SSP metal roof panels is a 29-gauge galvanized steel panel with an optional paint finish. The 29-gauge metal roof panels have a maximum coverage of 36". The panel has 3/4" tall ribs at 9" on center. The 29-gauge panel is ASTM A 792, Grade 80, with a minimum yield strength of 80,000 psi.

This evaluation report is for metal roof panels that are secured to a minimum 15/32" plywood deck. Thicker plywood may be used; however, the design pressure rating for the metal panels will be as specified in this evaluation report.

Limitations:
Design Wind Pressures: The design wind pressure uplift resistance is specified in Table 1.

Roof Framing: Roof framing (rafters or trusses must not exceed 24" on center.

Roof Deck Attachment: The roof deck must be secured to the roof framing to resist the required wind uplift design pressures.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is limited to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing, or roll roofing. The existing roof deck must be minimum 15/32" plywood. Note: Inspection of the existing roof deck must be made before installing the roof panels. The condition of the existing roof deck must be acceptable to receive the roof panels before the roof panel installation can proceed.

Roof Slope: The SSP roof panels may be installed on roofs with a roof slope as low as 1/2:12 if sealant is used on the panel side laps. If sealant is not used on the panel side laps, then the minimum roof slope is 3:12.

Installation:
Panels: The SSP roof panels must be attached to the roof deck in accordance with the installation details and Table 1.

Table 1
Attachment of 29-gauge SSP Roof Panel to nominal 15/32" plywood.

Wind Pressure	Fastener Pattern	Fastener Spacing
-71.0 psf	9" - 9" - 9" - 9"	24" on center
-153.5 psf	6" - 3" - 6" - 3" - 6" - 3" - 6"	12" on center

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The felt must be installed with minimum 6" side laps and minimum 2" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners must be applied along the overlaps not farther apart than 36" on center.

Attachment of Panels to Roof Deck: The panels must be fastened in accordance with Table 1 with minimum No. 10-14 x 1" long Woodgrip screws with a washer or a fastener with equivalent properties. The fastener pattern and on center spacing of the fasteners is specified in Table 1. The fasteners must be long enough to penetrate completely through the wood structural panels with a minimum exposure of 1/4" below the underside of the wood structural panels.

Panel Ends: As required by the manufacturer.

Panel Edges: As required by the manufacturer.

Trim: Components such as eave trim, rake trim, hip trim, and valley trim must be installed as required by the manufacturer.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.